

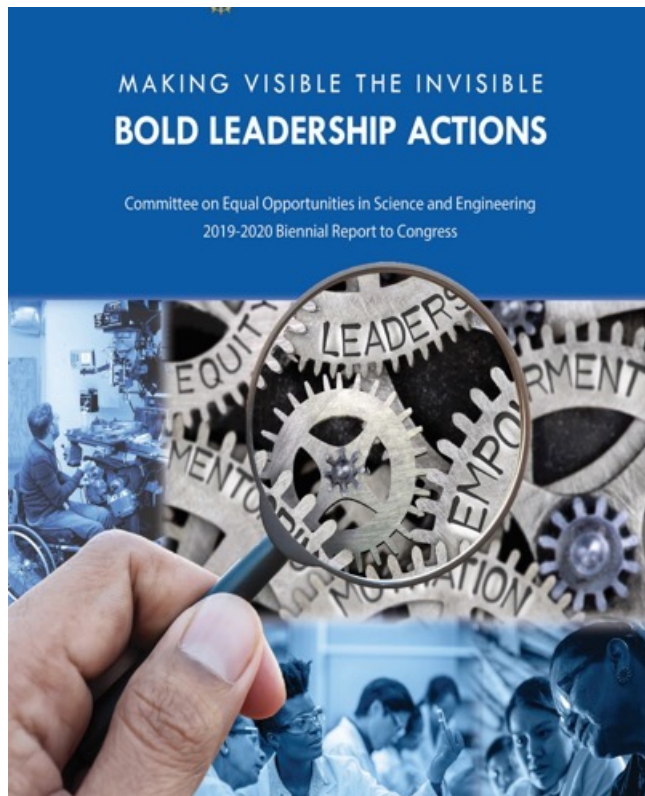


Making Visible the Invisible: Bold Leadership Actions

The Committee on Equal Opportunities in Science and Engineering (CEOSE)

Biennial Report to Congress 2019-2020

CEOSE Biennial Report to Congress 2019-2020

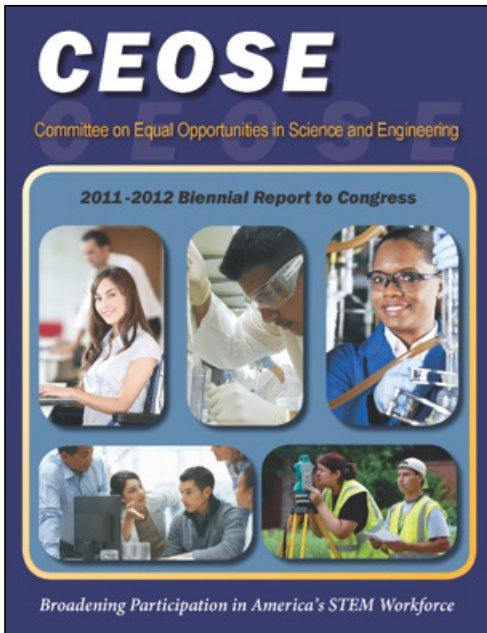


Key message:

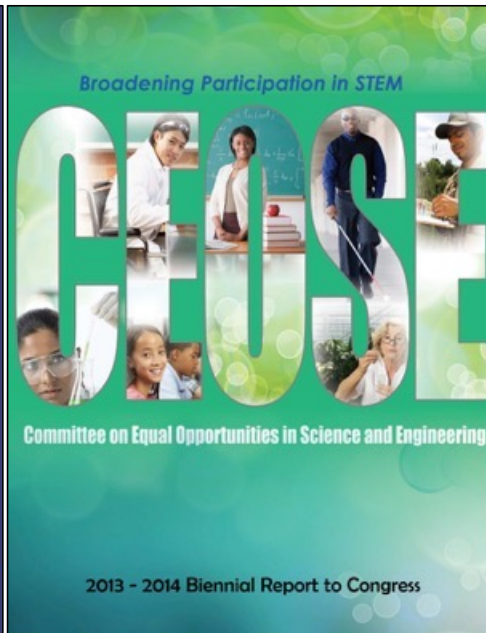
Broadening participation is not a problem to be fixed, but a critical strategy to promote and advance scientific research and learning that will develop a STEM workforce that is representative of all US citizens.



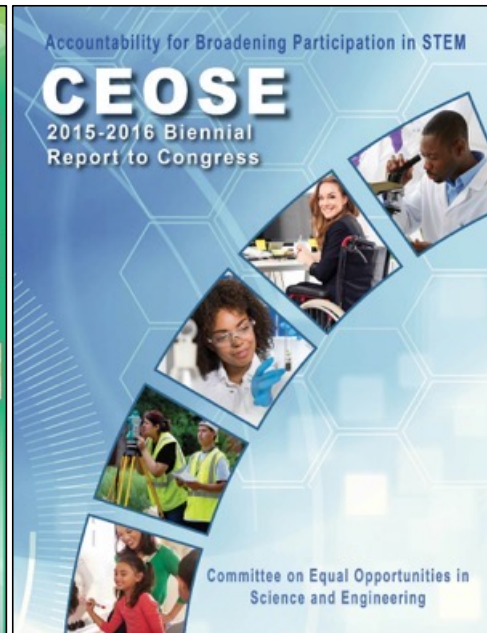
Previous CEOSE reports



Establish 'Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science', **INCLUDES**



Support science of broadening participation and mitigate barriers to broadening participation



Develop an accountability framework for assessing new strategies of broadening participation



Give attention to diverse voices across NSF's research and education portfolios through community-driven projects



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Elements included in the 2019-2020 CEOSE Report



Content:

- Exemplars of BP in Action
- Leadership Quotes
- Funding to MSIs
- BP Data Related to the Merit Review Process
- Suggestions for Transformative Leadership Actions



Propositions for Understanding the CEOSE Recommendation in the 2019-2020 Report

1. Much of the work and understanding related to broadening participation (BP) and diversity, equity, inclusion, and belonging remains unacknowledged, misunderstood, undervalued, and understudied.
2. *Broadening participation is not a problem but a strategy to promote and advance scientific research, learning, and innovation.*
3. *Leadership matters to broaden the participation of underrepresented groups to reflect their representation in the general population.*
4. NSF can do more to increase knowledge and awareness of invisibility issues in STEM communities, identify the participation and advancement of underrepresented groups in the scientific enterprise and acknowledge meaningful *leadership* actions for transformational change.



CEOSE Recommendation to NSF



CEOSE 2019 Recommendation

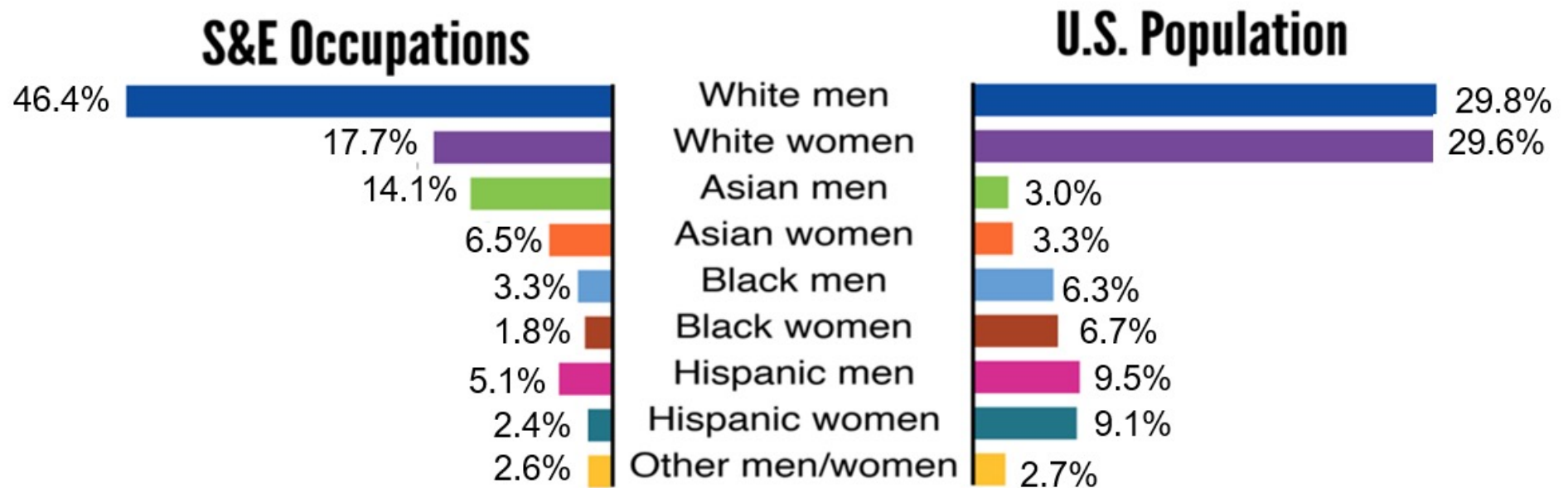
Demonstrate and promote bold leadership actions to create, integrate, and make visible elements within and across its programs to enhance broadening participation of underrepresented groups in STEM

This call to action includes the development of next generation leaders, the creation of prestigious BP awards, new training methods for reviewers and program officers, funding for the development of institutional BP infrastructure improvements, the development of programs with institutional transformation tracks which include review criteria that request evidence around leadership actions, encourage directorates to highlight effective leadership models, and more remote engagement in panels.



Race and ethnicity of citizens in science and engineering

Some groups have disproportionately low representation in science and engineering compared to the US population



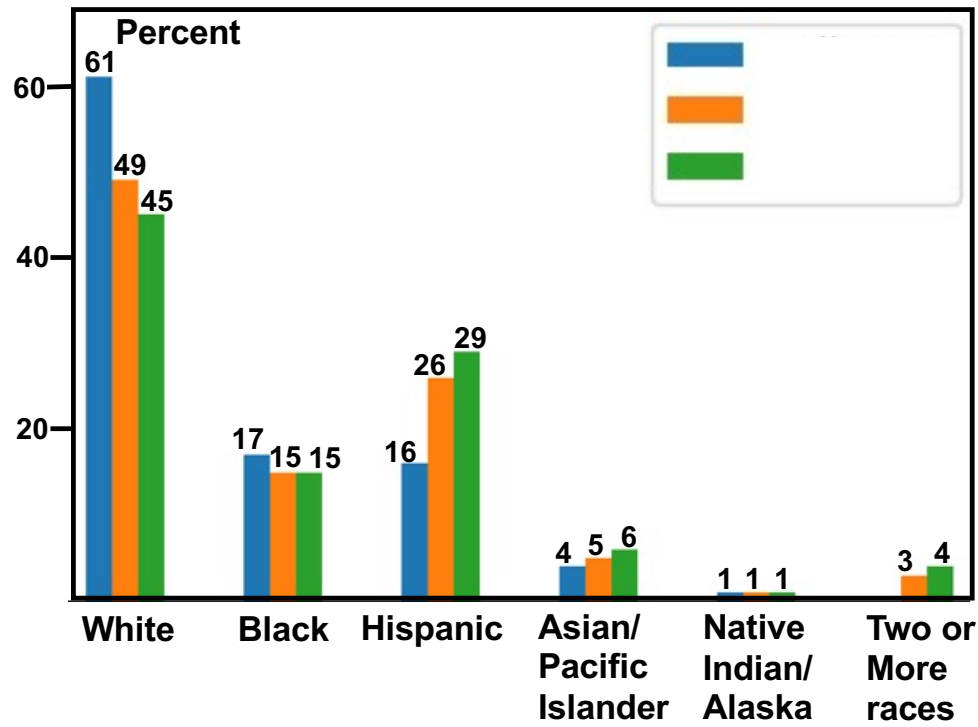
Sources: 2019 National Survey of College Graduates (left), 2019 American Community Survey (right)



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Future demographics in the USA

Percentage of public-school students enrolled in pre-kindergarten through 12th grade



Source: CEOSE report 2017-2019



How NSB can support and advance the 2019-2020 CEOSE Recommendation to NSF

- **Help to envision leadership strategies intentionally targeted to underrepresented groups, using an accountability framework and metrics for assessing progress**
- **Promote the development and mentoring of leadership as part of center-wide activities**
- **Support pilot programs purposely to develop leadership skills among NSF Directorates and volunteer exemplars of strategies in leadership development**





Thank You